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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/871,524	05/31/2001	Eliot M. Case	1813 USW 0611 PUS	1064
22193	7590	02/15/2005	EXAMINER	
QWEST COMMUNICATIONS INTERNATIONAL INC LAW DEPT INTELLECTUAL PROPERTY GROUP 1801 CALIFORNIA STREET, SUITE 3800 DENVER, CO 80202			WOZNIAK, JAMES S	
			ART UNIT	PAPER NUMBER
			2655	

DATE MAILED: 02/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/871,524

Applicant(s)

CASE, ELIOT M.

Examiner

James S. Wozniak

Art Unit

2655

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 6-13 and 16-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6-13 and 16-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. In response to the office action from 7/20/2004, the applicant has submitted an amendment, filed 9/29/2004, amending claims 1, 6, 11, and 16, while canceling claims 4-5 and 14-15 and arguing to traverse the art rejection based on the limitations regarding an ongoing dialog between a computer system and a human teacher and the association of a known word with a phonetic spelling of an unknown word (*Amendment, Pages 8 and 10*). The applicant's arguments with respect to Claims 8-10 and 18-20 have been fully considered but are moot with respect to the new grounds of rejection in view of Conrad et al (*U.S. Patent: 5,682,539*), Franceschi (*U.S. Patent: 6,321,196*) and Surace et al (*U.S. Patent: 6,144,938*).

2. The applicant's arguments with respect to the claim 6 objection have been fully considered and are convincing. Thus, the objection of claim 6, directed towards minor informalities, has been withdrawn.

Response to Arguments

3. The applicant's arguments with respect to **Claims 1 and 11** have been fully considered, but are not convincing for the following reasons:

With respect to **Claims 1 and 11**, the applicant argues that Beutnagel fails to teach the request of a human voice pronunciation of an unknown word in the form of ongoing dialog between the computer system and the human teacher, however the examiner notes that Beutnagel teaches a voice interaction that requests a voice pronunciation of an unknown word, which continues until a user has confirmed that a word has been entered correctly (*prompting a user to pronounce a new dictionary word, Col. 5, Lines 35-46, and continuing dialog to allow a computer to request a voice pronunciation of an new word, Col. 7, Line 65- Col. 8, Line 29*). Thus, since the dialog between the computer and user consists of multiple states that continue until a word has been correctly entered, Beutnagel teaches a functional equivalent of the aforementioned claim limitation.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 1-2 and 11-12** are rejected under 35 U.S.C. 103(a) as being unpatentable over Baker et al (*U.S. Patent: 6,092,044*) in view of Beutnagel (*U.S. Patent: 6,078,885*).

With respect to **Claims 1 and 11**, Baker recites:

Presenting a text spelling of an unknown word (*Col. 2, Lines 13-21 and Fig. 13, Element 1305*);

Receiving a human voice pronunciation of the unknown word from the human teacher (*Col. 3, Line 42- Col. 4, Line 65, and Fig. 13, Element 1310*);

Determining a phonetic spelling of the unknown word with the speech recognition engine based on the human voice pronunciation of the unknown word (*Col. 2, Lines 13-21 and Col. 15, Line 56- Col. 16, Line 5*); and

Associating the text spelling with the phonetic spelling to allow the text-to-speech engine to correctly pronounce the unknown word in the future when presented with the text spelling of the unknown word (*Col. 18, Lines 42-55*).

Baker further recites method implementation as a computer program stored on a computer readable medium (*Col. 19, Lines 21-31*).

Baker does not specifically suggest prompting a user to speak an unknown word pronunciation, wherein the prompt is in the form of an ongoing dialog between the computer system and the human teacher, however Beutnagel discloses such a prompt (*prompting a user to pronounce a new dictionary word, Col. 5, Lines 35-46, and continuing dialog to allow a computer to request a voice pronunciation of an new word, Col. 7, Line 65- Col. 8, Line 29*).

Baker and Beutnagel are analogous art because they are from a similar field of endeavor in recognition dictionary building. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Baker with a request in the form of an ongoing dialog to receive a voice pronunciation of a new dictionary word as taught by

Beutnagel to allow a user to interact with a computer system to confirm that a new recognition dictionary word has been entered correctly (*Beutnagel*, Col. 7, Line 65- Col. 8, Line 5).

With respect to **Claims 2 and 12**, Baker recites:

The phonetic spelling includes a sequence of phonemes (*Col. 5, Line 65- Col. 6, Line 7*).

6. **Claims 3 and 13** are rejected under 35 U.S.C. 103(a) as being unpatentable over Baker et al in view of Beutnagel, and further in view of Franceschi (*U.S. Patent: 6,321,196*).

With respect to **Claims 3 and 13**, Baker in view of Beutnagel teaches a method for adding an unknown word to a speech recognition dictionary that utilizes an ongoing dialog to request an unknown word pronunciation, as applied to Claims 1 and 11. Baker in view of Beutnagel does not specifically suggest that a phonetic spelling includes a sequence of known words, however Franceschi teaches such a configuration (*Col. 5, Lines 22-41 and Fig. 2*).

Baker, Beutnagel, and Franceschi are analogous art because they are from a similar field of endeavor in speech recognition utilizing spelling. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Baker in view of Beutnagel with the use of a sequence of known words for phonetic spelling as taught by Franceschi to provide more accurate speech recognition for commonly misunderstood words (*Franceschi, Col. 1, Lines 44-52*).

7. **Claims 6-7 and 16-17** are rejected under 35 U.S.C. 103(a) as being unpatentable over Baker et al in view of Beutnagel, and further in view of Surace et al (*U.S. Patent: 6,144,938*).

With respect to **Claims 6-7 and 16-17**, Baker in view of Beutnagel teaches a method for adding an unknown word to a speech recognition dictionary that utilizes an ongoing dialog, which includes a reprompt, to request an unknown word pronunciation, as applied to Claims 1 and 11. Baker in view of Beutnagel does not specifically suggest that the prompts have an information content level ranging from low to high and wherein repeated requests in an ongoing dialog progressively lessens as the dialog is repeated, however Surace teaches such a configuration (*Col. 10, Lines 26-36, and Fig. 7, Elements 706 and 708*).

Baker, Beutnagel, and Surace are analogous art because they are from a similar field of endeavor in speech recognition. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Baker in view of Beutnagel with the voice prompts have varying content levels, which lessens when a dialog is repeated as taught by Surace to allow an interactive dialog system to effectively adapt to a user experience level to implement a more efficient interaction when a user is familiar with the system (*Surace, Col.2, Lines 5-7*).

8. **Claims 8-10 and 18-20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Baker et al in view of Conrad et al (*U.S. Patent: 5,682,539*).

With respect to **Claims 8 and 18**, Baker discloses:

Receiving a human voice pronunciation of an unknown word from the human teacher (*Col. 2, Lines 13-21, and Col. 3, Line 42- Col. 4, Line 65*).

Determining a phonetic spelling of the unknown word with the speech recognition engine based on the human voice pronunciation of the unknown word (*Col. 2, Lines 13-21 and Col. 5, Line 65- Col. 6, Line 7*).

Baker further recites method implementation as a computer program stored on a computer readable medium (*Col. 19, Lines 21-31*).

Although Baker teaches determining a phonetic spelling of an unknown word, Baker does not teach associating a spelling of an unknown word with a known word, however Conrad discloses:

Receiving a known word that is related in meaning to the unknown word (*synonym, Col. 5, Line 64- Col. 6, Line 6*);

Associating the known word with the spelling of the unknown word to allow the recognition of the unknown word in the future as related in meaning to the known word (*cross-referencing an unknown word to a synonym, Col. 5, Line 64- Col. 6, Line 6*).

Baker and Conrad are analogous art because they are from a similar field of endeavor in recognition dictionary building. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Baker with the ability to cross-reference an unknown word spelling with a known synonym as taught by Conrad to provide a more natural speech recognition interface which is capable of recognizing multiple forms of a command upon cross-referencing an unknown word with a known synonym (*Conrad, Col. 1, Lines 13-21*).

With respect to **Claims 9 and 19**, Baker further recites a means for receiving and processing a speech input (*Col. 3, Line 42- Col. 4, Line 65*).

With respect to **Claims 10 and 20**, Baker additionally discloses a means for receiving a text spelling (*Col. 2, Lines 13-21*).

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Kleindienst et al (*U.S. Patent: 6,598,020*)- teaches the use of shorter prompts in an interactive dialog for experienced users.

Strubbe et al (*U.S. Patent: 6,721,706*)- teaches a speech recognition template that includes synonyms.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James S. Wozniak whose telephone number is (703) 305-8669 and email is James.Wozniak@uspto.gov. The examiner can normally be reached on Mondays-Fridays, 8:30-4:30.

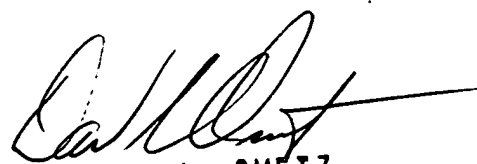
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached at (703) 305-4827. The fax/phone number for the Technology Center 2600 where this application is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the technology center receptionist whose telephone number is (703) 306-0377.

James S. Wozniak
2/10/2005



DAVID L. OMETZ
PRIMARY EXAMINER